For Research Use Only

4EBP1 Recombinant antibody

Catalog Number:83890-5-RR



Basic Information

Catalog Number: GenBank Accession Number:

83890-5-RR BC004459 GeneID (NCBI): Size:

100ul, Concentration: 1000 ug/ml by 1978 Nanodrop: **UNIPROT ID:** Q13541

Rabbit Full Name:

Isotype: eukaryotic translation initiation factor 4E binding protein 1 IgG

Immunogen Catalog Number: Calculated MW: 118 aa, 12 kDa AG5056

> Observed MW: 15-20 kDa

Applications

Tested Applications: WB, FC (Intra), ELISA

Species Specificity:

Positive Controls:

WB: A549 cells, HL-60 cells, HepG2 cells, HeLa cells, K-

Purification Method:

Protein A purfication

Recommended Dilutions:

WB 1:1000-1:8000

CloneNo.:

241055E7

562 cells, A431 cells

Background Information

4EBP1 (4E-BP1) is a translational regulator and functions by sequestering eukaryotic translation initiation factor 4E (eIF4E) from the translation initiation machinery. 4E-BP1 contains at least six phosphorylation sites (Thr37, Thr46, Ser65, Thr70, Ser83, and Ser112), four of which (Thr37, Thr46, Ser65, and Thr70) are known to be regulated by mTOR signaling. Phosphorylation of Thr37 and Thr46 is thought to prime 4E-BP1 for sequential phosphorylation of Ser65 and Thr70, which results in the dissociation of 4E-BP1 from eIF4E. (PMID: 12747827)

Storage

Store at -20°C. Stable for one year after shipment.

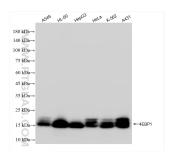
Storage Buffer:

PBS with 0.02% sodium azide and 50% glycerol pH 7.3.

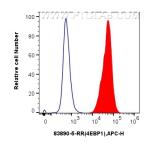
Aliquoting is unnecessary for -20°C storage

*** 20ul sizes contain 0.1% BSA

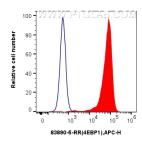
Selected Validation Data



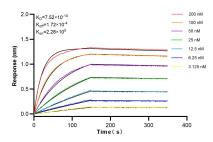
Various lysates were subjected to SDS PAGE followed by western blot with 83890-5-RR (4EBP1 antibody) at dilution of 1:4000 incubated at room temperature for 1.5 hours.



1x10^6 HeLa cells were intracellularly stained with 0.25 ug 4EBP1 Recombinant antibody (83890-5-RR, Clone:241055E7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



1x10^6 HEK-293 cells were intracellularly stained with 0.25 ug 4EBP1 Recombinant antibody (83890-5-RR, Clone:241055E7) and APC-Conjugated Goat Anti-Rabbit IgG(H+L)(red), or 0.25 ug Isotype Control (blue). Cells were fixed and permeabilized with True-Nuclear Transcription Factor Buffer Set.



Biolayer interferometry (BLL) kinetic assays of 83890-5-RR against Human 4EBP1 were performed. The affinity constant is 0.752 nM.